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Within the context of college union programs, the recreational games of bowling, billiards, table tennis, and some table games are discussed, including their history, facilities, and operation. Specific duties and responsibilities of the Recreation Area Manager are outlined, as are counter personnel and procedures, and maintenance personnel and procedures. There is a checklist of arrangements for planning and conducting tournaments. Included in the appendix are: amateur standing policy, materials for game promotion, director of games associations, key bowling lane dimensions, billiard table specifications, table tennis-table specifications, and regions of the Association of College Unions--International. (KP)

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COLLEGE UNIONS AT WORK

50TH ANNIVERSARY MONOGRAPH SERIES OF THE ASSOCIATION OF COLLEGE UNIONS-INTERNATIONAL

03742

The Union Recreation Area

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By GEORGE F. STEVENS

ROLE OF THE COLLEGE UNION

"1. The union is the community center of the college, for all the members of the college family — students, faculty, administration, alumni, and guests. It is not just a building; it is also an organization and a program. Together they represent a well-considered plan for the community life of the college.

"2. As the 'living room' or the hearthstone' of the college, the union provides for the services, conveniences, and amenities the members of the college family need in their daily life on the campus and for getting to know and understand one another through informal association outside the classroom.

"3. The union is part of the education program of the college.

"As the center of college community life, it serves as a laboratory of citizenship, training students in social responsibility and for leadership in a democratic society.

"Through its various boards, committees, and staff, it provides a cultural, social, and recreational program, aiming to make free time activity a cooperative factor with study in education.

"In all its processes it encourages self-directed activity, giving maximum opportunity for self-realization and for growth in individual social competency and group effectiveness. Its goal is the development of persons as well as intellects.

"4. The union serves as a unifying force in the life of the college, cultivating enduring regard for and loyalty to the college."

—Adopted by the Association general membership in 1956.

The Union Recreation Area

By

GEORGE F. STEVENS

The fifth publication

in the

Golden Anniversary Monograph Series

COLLEGE UNIONS AT WORK

William E. Rion, Editor

U.S. DEPARTMENT OF HEALTH, EDUCATION & WELFARE
OFFICE OF EDUCATION

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TABLE OF CONTENTS

Chapter		Page
I.	Introduction	1
II.	Bowling	3
III.	Billiards	8
IV.	Table Tennis	13
V.	Table Games	16
VI.	Recreation Area Manager	17
VII.	Counter Personnel and Procedures	20
VIII.	Maintenance Personnel and Procedures	23
IX.	Planning and Conducting Tournaments	27

Appendix

Exhibit A — Amateur Standing Policy	28
Exhibit B — Materials for Games Promotion	29
Exhibit C — Directory of Games Associations	34
Exhibit D — Key Bowling Lane Dimensions	35
Exhibit E — Billiard Table Specifications	36
Exhibit F — Table Tennis — Table Specifications	37
Exhibit G — Regions of the Association of College Unions — International	38

Bibliography 39

Preface

COLLEGE UNIONS AT WORK constitutes a series of monographs on college unions. Recognizing the Golden Anniversary of the Association of College Unions-International, this series is designed to provide helpful information concerning the operation and management of various phases of the college union. Previous monographs in the series have been "Administration and Operation Of The College Union" by Boris C. Bell (#1), "The College Union Outdoors" by Theodore Crabb (#2), "Art in the Union" by Norman F. Moore (#3), and "Planning For A College Union" by Frank Noffke (#4). Subsequent papers are expected to include such subjects as food service operations and craft facilities and programs.

The recreation games of bowling, billiards, table tennis and some table games have long played an important role in the program of college unions. This area, in space requirements and in equipment, represent not only one of the more expensive areas in a college union; but it also is one of the union's largest net income producing facilities. Careful planning of the facilities, an understanding of the function and role of this aspect of the college union, and the inclusion of sound operating practices can make the recreation games area and attractive and popular facility, an area with many programming possibilities, and a financially successful unit.

In their dedication to the principles and the purposes of the college union and in their eagerness to assist others in the development of unions on their campuses, the members of the Association have prepared this series. Grateful appreciation is extended to the authors, the respondents to questions and surveys, and to Chester A. Berry, Stanford University, and Porter Butts, University of Wisconsin, members of the editorial board. Their cooperation, assistance and patience has made this series possible.

William E. Rion, Editor
Director, Florida Union
University of Florida

About the Author

Mr. George F. Stevens is Director, Memorial Union and Student Activities, at Oregon State University. Prior to assuming his present position in 1963, he served twelve years as Assistant Director and Associate Director of the Iowa Memorial Union, State University of Iowa.

His service to the Association of College Unions-International has been extensive; serving as Chairman of the Recreation Committee (formerly Games Committee), as Chairman of the Golden Anniversary Program Committee, and, in 1965-66, as the Association's President-Elect.

CHAPTER I

Introduction

Educators have supported the role of the college union in the areas of social, cultural, and recreational programming with a firm conviction that the college community must concern itself with the total development of the student, including provisions for a good balance between study and tension-relieving leisure activity.

Leisure is not so compartmentalized that it can be separated into social, cultural, or recreational categories as three distinct areas of activity. Most of the formal and informal programs taking place in the union combines social, cultural, and recreational values. Thus, hanging an art show, swinging a square dance partner, reading a good magazine, or listening to a recorded sonata are all forms of recreation which occur in college unions.

So, also, table games and bowling have important social values. Some contribute to physical coordination; others to mental alertness.

The union is likely to emphasize games that can be played throughout a lifetime, in order to encourage the development of wholesome recreational skills and habits which can be carried over into post-college leisure activity.

Some of these games require very limited facilities such as the table games of bridge, chess, and checkers. These usually are provided without a charge for play. Others such as table tennis, billiards, and bowling require more complex equipment and in most cases a charge is made.

An initial consideration in the development of facilities for any of the aforementioned activities is that of evaluating the interest, desirability, and potential patronage of such games in the particular campus community. This should be followed with a concern that the activity fall within the limits of local recreation budgets as well as within the limits of good business practices.

These considerations are not entirely independent of each other. If there is little interest in the game, or if adequate provisions are made for it elsewhere, justification from either a participation or a financial standpoint might be difficult.

A study of the community should be made to determine to what extent recreational opportunities and facilities are provided and to what extent they are available to, and utilized by students, staff, and faculty. Often the town facilities are so heavily scheduled with year-round town leagues that campus groups have very limited opportunity for play. An analysis of the charges for play, the availability and accessibility of the areas to members of the university family, and the condition and atmosphere of the facilities provided is helpful in determining the potential success of additional facilities on the campus.

Experience has proven that an attractive new games facility does much to stimulate interest in games where little or no interest was evidenced prior to its existence.

The college student is typically a participant. His age, physical condition, and enthusiasm tend to create unusual demands for activities of all sorts but particularly appealing to him are activities which are recreational in nature. Furthermore, recreation programs, intramural programs, campus tournaments, and classes in physical education do much to stimulate interest in the games included in the union. The absence of such recreational facilities and

expressions of interest in them should not lead to the assumption that their potential is of no significance to the campus.

Student program committees usually work in close cooperation with staff in the development and promotion of on-going games activities such as special tournaments, leagues, contests, or social get-togethers. These events may range in scope from specialized types of activity in connection with individual games to full scale "open houses" in the recreation area in which all of the facilities are featured. The limits of such program development are often determined primarily by the creative abilities of the planners, since imaginative planning does much to assure the success of activities of this nature.

The Association of College Unions-International, through the program of its Recreation Committee, provides a stimulus for games on the campus by conducting annual intercollegiate tournaments in billiards, bowling, table tennis, bridge, and chess. These tournaments provide additional dimensions to campus programming through regional and national face-to-face tournaments. Participation over the years has increased so markedly that the Association has continued their development and refinement.

It is important that extreme care be given to the overall atmosphere existing in the recreation area. Standards of high conduct are imperative if the ideals and values of the games are to be realized. Games of skill are likely to be accompanied by gambling and rowdiness. It is essential, therefore, that adequate provisions for leadership and supervision be included in the budgeting and planning of such facilities from the outset.

By the same token, careful attention must be given to providing competent instruction for the games to be included. If this is not done, participants will not receive the full value of the games and facilities offered. A thorough knowledge of the fundamentals of the game along with a competence in the basic skills will make play more interesting to the participant and do much to assure his continued patronage.

Whenever possible the recreation area should be developed as a unit controlled by one counter station. Billiards, bowling, table tennis, bridge, chess, and other games equipment should be dispensed from this station, which should be centrally located to give the attendant a visual control of all games areas. It is also often desirable to include a vending or snack service in the general vicinity of the recreation area in order to assure a continuous traffic flow to expose larger numbers to the facilities and at the same time to provide refreshments for those participating.

CHAPTER II

Bowling

Capsule History

Today's bowler may point with pride and authority to a seven thousand year history of the sport. Ten pin bowling has experienced a period of development and refinement dating back to the Egyptian culture in 5200 B.C. It has had an evolution ranging from crude stone implements and names such as bowls, skittles, boccie, dutch pins, four corners, nine pins, curling, cloish, loggats, half pole, basque, quilles, and many more. Some of these games still exist today. Variations of the game have appeared in cultures completely remote from one another. For example, research has revealed that ancient Polynesians participated in a form of bowling which required a court 60 feet long -- almost the exact distance used in bowling lanes today!

The growth of bowling has not been without obstacles or interruption. In 1366 King Edward III enacted legislation prohibiting play out of fear that its growing popularity might overshadow the popularity of archery which was considered to be important to England at the time for military purposes. This legislation was later reinforced by Richard II in 1388.

In the United States the Puritans in 1658 forbade participation in bowling as sinful, and in 1841 the Connecticut state legislature asked legislation prohibiting bowling because it appeared as though gamblers had control of the game.

Ten pin bowling was introduced sometime between 1820 and 1830. Since that time the refinements of play, facilities, and equipment (particularly the automation of pin setting in more recent years) have made bowling a household word and a family activity. It is reported that bowling enjoys the greatest number of participants of all of the organized sports in the world.

The Association of College Unions-International has conducted intercollegiate tournaments in bowling for more than a decade. The development of this program was predicated upon the popularity of the game on the campus and a desire to add new dimensions of participation for the college bowler. This program is conducted on an annual basis and consists of campus tournaments, regional tournaments, and national tournaments, all on a face to face basis. It has done much to stimulate interest and participation in the local campus bowling program. During the 1964-65 school year, the Intercollegiate Tournament participation in Men's Bowling was 13,986 students representing 188 institutions; for Women's Bowling, 8,154 students representing 87 colleges and universities.

Facilities

The initial cost of bowling facilities represents the largest investment in the recreation area because of the extensive equipment requirements of the game. Estimates of per lane costs range from twelve thousand to thirteen thousand dollars. This does not include the cost of the building itself, but it does include all equipment needed for play, such as: bowling beds and furniture, lockers, balls, scoring tables, automatic pin setting machines, rental shoes, and other items.

It is possible for a small initial investment to lease automatic pin setting equipment on a lineage basis. Two advantages of leasing arrangements are as follows:

1. Low initial investment. (basically installation costs).
2. The promise of equipment replacement based upon a certain number of lines or a stated number of years, which ever comes first (in other words, the manufacturer takes the risks of obsolescence).

It is also possible to purchase equipment on a lineage payment basis if the capital requirements of an outright purchase are deemed prohibitive. All financial arrangements can be conservative in comparison to the potential revenues from the game. In a general survey of all unions in 1963, 71 per cent of the unions having automatic pinsetting equipment reported ownership, the remaining 29 per cent reported leasing the equipment.

The life expectancy of the pin setting equipment is greater than the usual ten year period slated for equipment depreciation. Presumably this equipment will last as long as it is properly maintained because of the replacement feature of all of the parts of the machinery. Improvements in function may come by lowering the sound level of operation, reducing the number of moving parts and improving the handling of pins and appearance; all to the end of decreasing operating costs and improving eye appeal. Essentially, the basic requirements for speed and accuracy of pin setting will remain the same. Equipment in operation today, therefore, has a yet unproven life expectancy, and functions at a level of efficiency in excess of the needs of the bowler. The machines are capable of matching the pace he sets. His major concerns are that the pins be placed quickly and that they be spotted accurately. The performance of today's equipment is adequate for these purposes.

In the general survey of 1963 (180 unions responding), 40 per cent reported bowling facilities. Table 1 indicates the number of lanes, by enrollment, reported in this study.

Table 1. Number of Unions with Bowling Facilities, By Enrollment and Number of Lanes, 1963.

No. of Ten Pin Lanes	Total Unions		Enrollment: Under 2500		2500-4999		5000-9999		Over 10,000	
	No.	%	No.	%	No.	%	No.	%	No.	%
1 - 3	1	1	1	6	-	-	-	-	-	-
4 - 6	23	32	12	71	8	50	2	10	1	6
7 - 10	22	31	4	23	8	50	6	28	4	23
11 - 15	11	16	-	-	-	-	7	34	3	18
16 - 20	14	20	-	-	-	-	6	28	9	53
TOTALS	71	100	17	100	16	100	21	100	17	100

A more extensive study of specifically the games areas was conducted in 1961 by the Recreation Committee of the Association of College Unions-International. Table 2 shows the reporting of bowling facilities and their relation to enrollment in the 1961 study. A meaningful guidepost for a relationship between enrollment and the number of lanes provided can be noted in the rate of incidence columns. This survey was sent to 338 institutions and had a return of 297 responses. Of the number reporting, many indicated that their existing facilities were inadequate. The ratio of lanes to student enrollments was one lane per 1,250 students. The bowling industry considers the ratio of one lane per 1,000 people to be a reliable rule of thumb for determining the number of lanes a community is capable of supporting. Considering the 1,250 to 1 ratio resulting from the college unions studied, the indication that a number of unions reported existing facilities to be inadequate, and the fact that the college age group is "participant" sports minded, it would seem that the 1,000 ratio used by industry is a conservative estimate of the potential of the average campus.

Table 2. Number of Unions with Bowling Facilities, By Enrollment and Number of Lanes, 1961.

Enrollment	Number of Lanes										
	2	4	6	7	8	10	12	14	16	20	Total
Under 1,300	3	4					1				8
1,300 - 4,000	1	5	10		9	1					26
4,001 - 6,700			3		7	2	1		1		14
6,701 - 9,400		1	2		7	2	1		1		14
9,401 - 12,100					2	2		1	1		6
Over 12,100			1	1			3	1	5	1	12
Total	4	10	16	1	25	7	6	2	8	1	80

It is almost standard procedure to install lanes in pairs rather than odd numbers. An even number of lanes facilitates the scheduling of leagues, tournaments, and other competitive programs.

In the planning of facilities for bowling it is important that representatives of the bowling industry be brought together with the architect in the early stages. The basic space requirement for all makes of equipment are similar enough so that early planning may not require an early awarding of the contract. Exhibit D in the Appendix provides dimensions for bowling installations.

The advice and counsel of representatives from the industry can be invaluable in providing for the necessary space allotments, ventilation, lighting, electrical and acoustical requirements, and interior design. In a recent survey conducted by the Association of College Unions-International a majority of the union administrators responding indicated that they would "like to re-design the games room of the college union in which they work." Half of these would like to increase the efficiency of their games operations and half would like to enlarge their facilities. These kinds of situations could have been avoided if consultants had been employed in the early stage of planning.

Operations

Table 3 is a composite of the 1963-64 bowling operations of ten mid-western college unions in institutions ranging in enrollments from 11,500 to 30,500 students, with a total enrollment of 224,841 students. The number of bowling lanes per union ranged from six to 20 and the total number of lanes represented was 137.

The rate per line charged for play ranged from 35¢ to 40¢ for students with a median of 40¢. Five of the unions reporting had a different rate ranging from 40¢ to 45¢ for non-students, with a median of 45¢. The composite gross income of $512,423 represents approximately $2.27 per student enrolled with a net income of 67¢ per student.

Table 3. Composite Bowling Operations of Ten Mid-Western College Unions, 1963-64.

	Composite	Average Per Lane	Median Per Lane
INCOME:			
Regular Bowling	$400,150	$2,920	$2,714
Physical Education Bowling	79,845	583	443
Shoe Rentals	30,885	226	187
Locker Fees	1,543	11	8
TOTAL INCOME	$512,423	$3,740	$3,352
EXPENSE:			
Salaries and Wages	$203,737	$1,487	$1,437
Laundry and Uniforms	1,445	11	9
Supplies and Pins	24,272	177	187
Bowling Shoes	1,529	12	2
Depreciation, Repair and/or Rental	103,514	755	747
Miscellaneous	27,835	203	30
TOTAL EXPENSE	$362,332	$2,645	$2,412
NET INCOME	$150,091	$1,095	$ 940

A 1965 survey of charges for college union recreation area activities, conducted by the Recreation Committee of the Association of College Unions-International, was mailed to 494 member institutions. There were 221 institutions responding with 111 reporting the possession of bowling facilities, six of which had candlestick bowling rather than ten-pin bowling.

Four institutions reported an hourly charge for bowling ($1.50, $2.00, $2.50 and $2.80), and four institutions indicated an additional 5¢ per line charge after 6 p.m. Except for these variations all schools responding reported a straight per line charge.

Table 4 shows the charges for open bowling, league bowling, and physical education bowling classes, by geographic regions of the Association. The key to the states included in the regions may be found on page 38.

Table 4. Charges for Open, League, and Physical Education Bowling, by Regions of the Association of College Unions-International, 1965.

	Regions															
Open Bowling (Per Line)	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	Total
25¢ per line	1	2	0	1	0	0	0	0	0	0	1	3	0	0	0	8
30¢ per line	2	1	0	0	1	0	0	1	1	1	0	3	1	0	0	11
35¢ per line	2	5	1	5	2	1	4	5	7	7	5	3	9	6	0	62
40¢ per line	2	0	1	1	0	1	3	3	6	2	2	0	4	0	2	27
45¢ and over	0	1	0	0	0	0	2	0	0	0	0	0	0	0	0	3
Totals	7	9	2	7	3	2	9	9	14	10	8	9	14	6	2	111
League Bowling (Per 3 lines)																
Under $1.00	3	2	0	1	0	0	0	0	1	0	0	5	0	0	0	12
$1.00	3	3	1	2	0	0	2	4	6	3	2	0	5	0	0	31
$1.05	1	1	0	3	1	2	3	1	2	2	3	3	6	2	0	30
$1.10	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	1
$1.15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
$1.20	0	0	1	0	0	0	2	2	5	4	1	0	3	4	1	23
Over $1.20	0	0	0	1	0	0	1	1	0	0	1	0	0	0	1	5
Totals	7	6	2	7	2	2	8	8	14	9	7	8	14	6	2	102
Physical Education Bowling Classes																
Per Line:																
15-20¢	0	0	0	1	0	0	0	0	0	1	1	0	0	0	0	3
25-30¢	3	0	0	2	0	0	1	1	1	4	3	0	2	0	0	17
35-40¢	0	0	2	1	0	0	4	3	2	1	0	0	3	0	0	16
Per Quarter:																
$4.00-6.00	0	1	0	0	0	0	2	2	2	2	2	1	1	1	0	14
6.01-9.00	0	0	0	0	1	0	0	0	3	0	0	0	1	4	0	9
Over 9.00	0	0	0	0	0	0	0	0	0	0	0	1	1	0	2	4
Per Semester:																
$4.00-6.00	0	0	0	0	0	0	3	0	0	0	0	0	0	0	0	3
6.01-9.00	0	0	0	0	0	1	0	1	2	0	1	0	2	1	0	8
9.01-12.00	0	0	0	0	0	1	0	0	2	0	2	1	0	0	0	6
Over 12.00	0	1	0	0	0	0	0	1	0	0	0	2	1	0	0	5
No Charge	0	4	0	2	1	1	0	0	0	0	0	0	0	0	0	8
Totals	3	6	2	6	2	3	10	8	12	8	9	5	11	6	2	93

CHAPTER III

Billiards

Capsule History

The game of billiards is a sport that can trace its history back to Egyptian times. There is some indication that in England it evolved out of lawn bowling or bowls, the latter being a game in which the balls are driven with a mace, much in the same manner as a croquet. It obviously has an advantage over lawn bowling and bowls because its equipment can be accommodated in an average size room and it can be accommodated the year around.

Mary, Queen of Scots, was said to be an enthusiast of the game and Lord Byron made mention of billiards in his writings. Shakespeare mentions billiards in the play Anthony and Cleopatra (Act II, Scene 5), but scholars tend to believe this may have been poetic license. Among other names associated with the game are Louis XIV of France, George Washington, Thomas Jefferson, Alexander Hamilton, and Abraham Lincoln.

The Spaniards are credited with bringing the game to the American continent in 1565 at St. Augustine, Florida. Billiards flourished throughout the years and in 1859 the first national championship match was staged in Detroit. The first recorded intercollegiate match pitted Harvard University against Yale University in "the grand trial of skill" in 1860, in Worcester, Massachusetts; with Harvard emerging the victor.

Cambridge was matched against Oxford in England in 1865 for the first recorded university tournament in that country. The outcome was the sharing of titles; Cambridge won the team championship and Oxford the individual championship. The first world championships for pocket billards and three cushion billiards were held in 1878.

The Association of College Unions-International intercollegiate tournaments as we know them today had their beginnings in 1932 and have run continuously with the exception of the 1945-46 school year. Much of the credit for interest and participation in these tournaments through the years must be given to Charles C. Peterson. Through his tireless efforts in traveling from campus to campus to teach the game, billiards became known in college unions throughout the country. His exhibitions and his dedication to the fundamentals of instruction earned him the fond title of "Dean of College Billiards" among his friends in the union field. Despite severe health handicaps during the latter years of his life, he remained active and proficient and his interest in the college union program continued until his death in 1962.

Facilities

The purchase of billiards equipment probably represents the second most costly investment in the games area. Depending upon the kind of billiards tables purchased, the range is approximately $800 to $1500 per table. This figure includes balls, ball trays, triangles, cues, and cue racks. There are four basic kinds of billiard tables: pocket billiards, carom billiards, snooker, and bumper. A number of games, some regional in nature, may be played on these tables, but basically the games played universally are pocket billiards, carom billiards, and snooker.

Although the initial cost per table might appear to be high, a quality table will last several life times if properly maintained, making unrealistic, as in bowling, the use of ten per cent or ten year amortization schedules. A good maintenance program is the key factor in the life span of the equipment.

In the general Association survey of 1963, 79 per cent of 180 unions responding reported having billiard rooms. Table 5 indicates the number of tables, by enrollment, reported in this study.

Table 5. Number of Unions with Billiard Facilities, By Enrollment and Number of Tables, 1963.

No. of Tables	Total Unions		Enrollment: Under 2500		2500-4999		5000-9999		Over 10,000	
	No.	%	No.	%	No.	%	No.	%	No.	%
1 - 2	22	15	18	39	4	10	-		-	
3 - 6	57	40	23	50	23	56	8	27	4	16
7 - 10	34	24	5	11	12	29	11	36	5	19
11 - 15	21	15	-	-	2	5	8	27	11	42
16 - 20	8	5	-	-	-	-	3	10	5	19
Over 20	1	1	-	-	-	-	-	-	1	4
TOTALS	143	100	46	100	41	100	30	100	26	100

The more extensive recreation facility study of 1961, provides further information regarding these facilities and their relationship to enrollment, as shown in Table 6. A meaningful guidepost is provided in the rate of incidence column. This chart represents the total number of tables including snooker, carom, and pocket billiards. Tables 7, 8, and 9 indicate the number of tables provided for each of the individual games.

Table 6. Number of Unions with Billiards Facilities, By Enrollment and Number of Tables, 1961.

Enrollment	Number of Tables															
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	Over 14	Total
Under 1,500	8	9	8	6	2			1								34
1,500 - 3,000	3	9	5	8	3	1	3	1	1	1						35
3,001 - 5,500		2	7	5	7	2	4	3		1						31
5,501 - 8,000		3		3	1	1		8	2	2	5	2				27
8,001 - 10,500			1		1	3	1				1	3				10
Over 10,500	1		1	2		3	1	2	4	2			1	3	5	25
Total	12	23	22	24	14	10	9	15	7	6	6	5	1	3	5	162

Table 7. Number of Unions with Pocket Billiards Facilities, By Enrollment and Number of Tables, 1961.

Enrollment	Number of Tables													
	1	2	3	4	5	6	7	8	9	10	11	12	Over 12	Total
Under 1,500	5	13	8	1	1			1						29
1,500 - 3,000	3	10	6	10	3									32
3,001 - 5,500	1	6	7	5	4	1	4							28
5,501 - 8,000	3	1	2	4	2	2	5	3		1	1	1		25
8,001 - 10,500			3		1	4			1		1			10
Over 10,500	1	1	2	4	1	3	2	3	1	3			3	24
Total	13	31	28	24	12	10	11	7	2	4	2	1	3	148

Table 8. Number of Unions with Carom Billiards Facilities, By Enrollment and Number of Tables, 1961.

Enrollment	Number of Tables						
	1	2	3	4	5	6	Total
Under 1,500	8						8
1,500 - 3,000							0
3,001 - 5,500	11				1	1	13
5,501 - 8,000	14	3					17
8,001 - 10,500	2	2					4
Over 10,500	9	5	3	2		1	20
Total	44	10	3	2	1	2	62

Table 9. Number of Unions with Snooker Facilities, By Enrollment and Number of Tables, 1961.

Enrollment	Number of Tables								
	1	2	3	4	5	6	7	13	Total
Under 1,500	6	1							7
1,501 - 3,000	5	1		1					7
3,000 - 5,500	10	2		2					14
5,501 - 8,000	2	4	3		1	1	1		12
8,001 - 10,500	1	3		1	1				6
Over 10,500	6	5	1	2	1			1	16
Total	30	16	4	6	3	1	1	1	62

The games of billiards have been strongly supported on college campuses through the years, but there has been a surge of interest on the part of college women since 1963, a trend also noticable in commercial establishments.

Of the 297 college unions responding to the 1961 questionnaire, a large number indicated the desire to add more tables or to build new facilities. As reported, the ratio of existing tables to student enrollments was 1,000 students per table. As a result of the findings of this study, along with the inadequacies cited, one could safely reduce the ratio to a range of approximately 800 to 900 students per table.

Of the 162 unions reporting billiards tables, approximately 148 had pocket billiards tables, 62 had carom billiards tables, and 62 had snooker tables. The survey indicated that the ratio of carom billiards tables to snooker tables varies depending upon the region of the country. In most instances pocket billiards was the most prevalent game, carom second, and snooker third, but in some areas snooker outnumbered carom. As might be expected, larger institutions were most likely to provide facilities for all three games.

Representatives of the billiards industry should be consulted early in the planning stages of billiards facilities because of the experience the industry has accumulated. Space allocation is important in terms of table location, spacing between tables, and spacing to adjacent walls. It is important to note these relationships in advance of construction in order to be sure adequate provisions are made to accommodate the needs of the numbers of tables desired. Exhibit E in the Appendix indicates the optimum space requirements for table placement. Many unions space tables 4 feet apart, and some allow only 3 feet between tables. The minimum spacing between tables and walls is 5 feet. The standard size billiard table is 5 feet, 3 inches by 9 feet, 5 inches.

Billiards rooms are once again becoming billiards "parlours," complete with carpet, genteel atmosphere, and coeducational participation. New tables come in varying styles with a selection of colored cloths. A new emphasis is being placed upon the decor of billiards rooms to make the surroundings attractive to the youthful patrons they serve, especially women. Design and color play an important role in creating the atmosphere desired. Here again, representatives of the billiards industry can provide valuable services based upon experiences in the field.

The Association of College Unions-International's annual intercollegiate billiards tournaments provide a stimulus to the participation in local campus billiards programs. These tournaments are conducted annually and consist of local campus tournaments, regional tournaments and national tournaments, all on a face-to-face basis. During the 1964-65 school year, the Intercollegiate Tournaments in pocket and carom billiards had 12,341 students entered in competition, representing 150 schools.

Operations

Table 10 presents the 1963-64 school year composite billiards operations of ten midwestern college unions in institutions ranging in enrollments from 11,500 students to 30,500 students, with a total enrollment of 224,841 students. The number of billiards tables per institution (including pockets, carom and snooker) ranged from 7 to 24 and the total number of tables represented was 161.

The rate per hour per table ranged from 60¢ to 90¢ for students with a median of 80¢. Three of the unions reporting had a different rate for non-students ranging from 85¢ to $1.00 per hour per table, with a median of $1.00. The composite billiards income of $301,872 represents approximately $1.34 per student enrolled with a net operating balance of 78¢ per student.

Table 10. Composite Billiards Operations of Ten Mid-Western College Unions, 1963-64.

	Composite	Average Per Table	Median Per Table
INCOME:			
Billiards	$301,872	$1,874	$2,017
EXPENSES:			
Salaries and Wages	$ 91,666	$ 570	$ 559
Supplies	6,468	40	33
Repairs and Replacements	21,287	132	148
Miscellaneous	6,740	41	19
TOTAL EXPENSE	$126,161	$ 783	$ 759
NET INCOME	$175,711	$1,091	$1,258

The 1965 survey of charges for college union recreation area activities, with 221 responses from the 494 member institutions, shows 180 reporting the possession of billiards tables.

A preponderance of the schools reporting indicated the hourly rate as the method for charging for billiards. Some reported a charge determined per hour by the number of players, and some indicated a per table rate plus a rate for the number of players. Another method mentioned was a charge for the first half hour with a different rate for each succeeding hour. These variances were noted in the survey, but the hourly rate was considered to be the most representative of the schools reporting.

Table 11 shows the charges for billiards as reported by geographic regions of the Association. The key to the states included in the regions may be found on page 38.

Table 11. Charges for Billiards, per Table per Hour, by Regions of the Association of College Unions - International, 1965.

Charges	Regions															
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	Total
No Charge	2	4	0	2	1	3	0	0	0	0	1	1	0	0	0	14
Under 55¢	2	2	1	2	0	3	2	1	0	0	7	4	1	1	0	26
55¢ to 69¢	8	4	1	7	3	2	2	7	8	8	6	9	9	5	2	81
70¢ to 84¢	2	0	0	1	1	0	2	4	6	2	5	0	5	2	1	31
85¢ to 99¢	0	0	1	1	2	0	3	0	3	7	0	0	1	0	0	18
$1.00 to $1.14	0	1	0	0	0	1	2	2	1	0	0	0	0	1	0	8
$1.15 to $1.29	0	0	1	0	0	0	1	0	0	0	0	0	0	0	0	2
Totals	14	11	4	13	7	9	12	14	18	17	19	14	16	9	3	180

CHAPTER IV

Table Tennis

Capsule History

The game of table tennis, a derivative of lawn tennis, had its origin in England in the latter half of the nineteenth century. The early history of the game indicates that it was little more than a challenge to keep a rubber ball bouncing on a table -- any table -- across a stack of books or similar obstacle located in the center of the table. Crude bats constructed of wood or heavy cardboard were used to keep the ball bouncing.

Credit is given to James Gibb, an Englishman, for introducing the celluloid ball to the game in 1899, thus starting it on a wave of popularity throughout England. The social set of the time played the game with enthusiasm and the term "ping-pong" developed because of the noises made by the ball ricocheting off the table and the paddle. "There were ping-pong teas, ping-pong songs, ping-pong parlors, even fashion was affected by the creation of ping-pong non-hobble skirts," according to Emily M. Fuller, National Womens Singles Champion. The game was also called "whiff-whaff" and "gossima." Because the name "ping-pong" was adopted by a manufacturer of equipment as its trade mark name, the more generally accepted name for the game is "table tennis."

In 1902, Mr. E. C. Goode, of London, developed the rubber faced paddle which made it possible to get more action from the ball. Despite these improvements the game suffered in popularity because of the lack of standardization in rules of play.

It was not until 1926 that this problem was solved with the organization of the International Table Tennis Federation formed in Berlin. At this time formal rules of play were adopted and playing equipment was standardized. A rebirth of interest came with this standardization and the conducting of the first world table tennis tournament in 1926. The world tournament has been an annual event ever since, with the exception of the World War II years. The United States Table Tennis Association has actively participated in the International Tournament since 1934.

The Association of College Unions-International introduced table tennis as a phase of intercollegiate competition in the fall of 1960. The program, still in the developmental stage, shows evidence of steady growth. During the 1964-65 school year, the Intercollegiate Tournament participation was 5,988 students representing 115 institutions.

Facilities and Operations

The 1961 Association of College Unions-International Games Facility Survey indicated that out of 297 institutions responding, 190 possessed a total of 675 table tennis tables.

Table 12 indicates the actual reporting in 1961 of college union table tennis facilities and their relationship to bracketed enrollments. A meaningful guidepost is provided in the rate of incidence columns. The correlation between total enrollments of schools with table tennis facilities and total number of tables indicates that approximately one table has been provided for every 1,000 students. A number of schools indicated their existing number of tables to be inadequate, so this ratio should be considered to be minimal.

In the Association's general survey of 1963, 82 per cent of the 180 unions responding reported having table tennis facilities. Table 13 indicates the number of tables, by enrollment, reported in the study.

Table tennis facilities are often available in other areas of the campus such as; living units, gymnasiums, and religious houses. The figures shown in these tables apply only to those located in the college union and should not be construed as the total number for the institution.

Exhibit F in the Appendix indicates minimal dimensions for table spacing in the table tennis area. Some unions report five feet between tables to be sufficient for casual play and an eight foot backcourt as optimum. Tournament conditions require more space between tables and a ten foot backcourt.

Table 12. Number of Unions with Table Tennis Facilities, By Enrollment and Number of Tables, 1961.

Enrollment	Number of Tables											
	1	2	3	4	5	6	7	8	9	10	Over 10	Total
Under 1,300	7	18	9	5		1						40
1,300 - 2,000	2	13	9	7	1	2					1	35
2,001 - 4,000	1	11	5	8	1	2	3	4	1	2		38
4,001 - 7,000	4	7	8	4	3	2	2					30
7,001 - 10,000		7	1	3	4	3	1	1			1	21
Over 10,000	1	7	3	7	3	2	1	1		1		26
Total	15	63	35	34	12	12	7	6	1	3	2	190

Table 13. Number of Unions with Table Tennis Facilities, By Enrollment and Number of Tables, 1963.

No. of Tables	Total Unions		Enrollment: Under 2500		2500-4999		5000-9999		Over 10,000	
	No.	%	No.	%	No.	%	No.	%	No.	%
1 - 2	65	44	28	52	15	42	9	33	13	43
3 - 6	67	46	25	46	18	50	13	48	11	37
7 - 10	12	8	-	-	3	8	3	11	6	20
11 - 15	3	2	1	2	-	-	2	8	-	-
TOTALS	147	100	54	100	36	100	27	100	30	100

The 1965 survey of charges for college union recreation area activities, with 221 responses from the 494 member institutions, shows 167 reporting the possession of table tennis facilities.

Twenty-five schools reported selling the balls to players. Some schools sell the balls but also charge for the use of paddles. Others charge a rate per paddle, or a flat rate per table with no time limit. The predominate system of charge reported however, was on an hourly basis per table.

Table 14 shows the charges for table tennis as reported by geographic regions of the Association. The key to the states included in the regions may be found on page 38.

Table 14. Charges for Table Tennis, per table per hour, by Regions of the Association of College Unions - International, 1965.

Charges	Regions															
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	Total
No Charge	3	8	5	7	2	5	1	2	2	5	2	4	0	0	1	47
5¢ to 10¢	2	2	0	0	0	1	1	0	1	1	0	1	1	0	0	10
15¢ to 20¢	5	1	0	0	0	1	3	3	2	3	3	2	2	0	1	26
25¢ to 30¢	4	1	1	0	2	0	0	1	5	1	4	7	6	5	0	37
35¢ and over	1	1	1	0	0	0	1	2	1	4	4	1	4	2	0	22
Sell ball	0	3	0	6	2	1	0	0	2	2	3	2	2	1	1	25
Totals	15	16	7	13	6	8	6	8	13	16	16	17	15	8	3	167

CHAPTER V

Table Games

Bridge and chess are the two most popular and universally played games of the table variety on the college campus. For this reason, these two games are included in the list of games for which the Association of College Unions-International conducts annual intercollegiate tournaments. Participation in the annual intercollegiate bridge tournament exceeds that of all of the other games included in the tournament structure.

During the 1964-65 school year, the Intercollegiate Tournament participation in bridge included 29,456 students from 131 schools; while the chess tournaments attracted 2,419 students representing 102 institutions.

Table games provide opportunities for concentration, mental discipline, and skill. Most unions have facilities which can be used for conducting a continuing program for such games and the cost of the games equipment is slight.

Other table games which are sometimes included in union programs are: checkers, chinese checkers, cribbage, monopoly, euchre and canasta.

Specialized Table Games

Table shuffleboard, table soccer, table bowling, and bumper pool are all games which require specialized tables. These tables are available in a variety of types and sizes. Though none of these games enjoys a very strong appeal among colleges and universities, they exist in large enough numbers to deserve mention in discussions regarding games programs.

CHAPTER VI

Recreation Area Manager

The Recreation Manager is the guiding, directing, and moving force of the recreation area. Responsible for coordinating the program, personnel, operations, and facilities as an integral part of the total union, he must be capable of representing the union in his contacts with students, faculty, and staff in the development of programs relative to the recreational facilities offered. He also may be assigned supervisory union responsibilities outside of the recreation area such as: advising student committees, supervising bicycle or locker rentals or similar operations not requiring full time supervision. The range of such assignments may be determined by administrative need and by the background and capabilities of the individual concerned.

Specific Duties and Responsibilities

1. Program
   a. Must be knowledgable about all of the games offered in regard to:
      1) Rules of play
      2) Scoring
      3) Tournament or league structures
      4) Instruction
      5) Intramural programs
      6) Promotion techniques for new program development

2. Personnel Administration
   a. Must develop and maintain an effective staff suited to the needs of the recreation area by:
      1) Analyzing manpower requirements in regard to:
         (a) hours of operation
         (b) peak periods of operation
         (c) adequate "swing shift" staffing
      2) Recruiting qualified personnel
      3) Providing and directing basic training for new employees
      4) Developing thorough job descriptions for staff positions

   b. Must provide supervision for personnel to maintain a high standard of performance by:
      1) Defining employees schedules, duties, and responsibilities
      2) Delegating specific authority to qualified employees
      3) Knowing and interpreting union building policies and personnel policies
      4) Knowing and interpreting philosophy and goals of the recreation area program

c. Must develop and maintain effective employee morale by:
   1) Maintaining good working relationships with employees
   2) Providing necessary leadership and guidance
   3) Developing keen spirit among employees

d. Must develop each employee's potential by:
   1) Evaluating each person's performance regularly
   2) Planning for his future development
   3) Recommending qualified personnel for salary adjustments and promotions when opportunities arise
   4) Giving assistance wherever needed

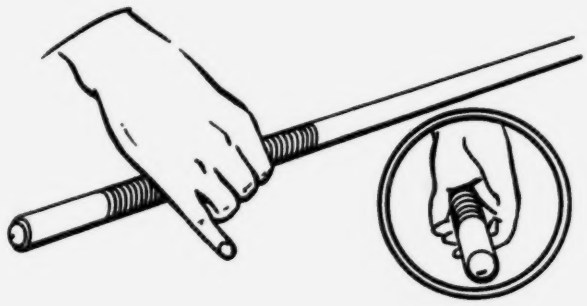
3. Office Management
   a. Must establish procedures for:
      1) Counter control
      2) Facility usage reports
      3) Purchase and use of supplies
      4) Purchase of repair and replacement items
      5) Correspondence
      6) Filing
      7) Appointments
      8) Office hours

4. Machine, Equipment, and Supply Maintenance
   a. Must develop a preventive maintenance program by:
      1) Establishing routine procedures for daily and weekly maintenance checks for service
      2) Establishing case history charts for machinery showing:
         (a) trouble calls
         (b) adjustments and cleaning
         (c) lubrication schedule
         (d) repair and breakdowns
      3) Establishing inventories to insure adequate supplies
      4) Maintaining usage records to determine life span of equipment

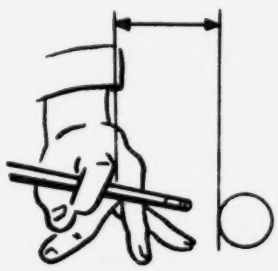
5. Lane Maintenance
   a. Must establish routine for daily lane maintenance including:
      1) Hours required daily for cleaning and conditioning lanes
      2) Procedures for cleaning, dust control, and application of conditioner
      3) Procedures and regularity of "running the lanes"
      4) Supervision to insure performance.

b. Must establish schedules for resurfacing and repair by:
   1) Periodically checking each lane and approach for breakage, wear, and discoloration
   2) Establishing periodic cleaning and recoating of pin decks, kick plates, gutter flats, etc.
   3) Planning for and scheduling annual resurfacing or recoating (under normal conditions lanes should be resurfaced every other year)

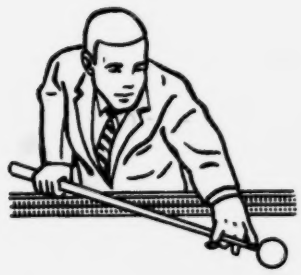
6. Table Maintenance
   a. Must establish routine procedures for daily maintenance of billiard tables and table tennis tables and general repair as needed (under normal wear conditions billiards tables should be recovered yearly)



CUE GRIP



LENGTH OF BRIDGE



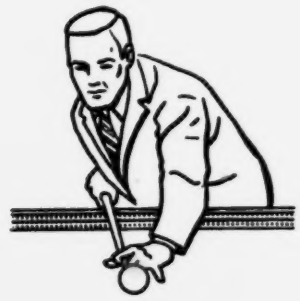
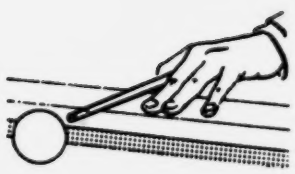
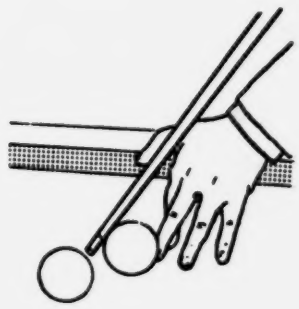


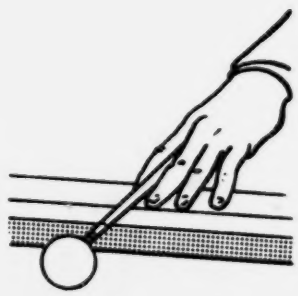
TABLE POSITION



RAIL BRIDGE



BALL BRIDGE



RAIL BRIDGE

CHAPTER VII

Counter Personnel and Procedures

Counter Attendant

The attendant at the control counter is the ambassador of the recreation area. He is a combination clerk, salesman, cashier, and public relations agent. The recreation area will be judged by his attitudes and actions more than those of any other employee because of his continuing contact with the members of the university community making use of the facilities. He should always bear this in mind and govern himself accordingly.

A. Personal Appearance:

1. **Should be well groomed at all times**
2. **Should not chew gum, eat food, or smoke while on duty**
3. **Should not slouch or appear to be too casual**

B. Duties and Responsibilities:

1. **Should maintain the control counter in a well organized, clean, and uncluttered fashion**
2. **Should provide friendly, courteous, and helpful service**
3. **Should transact business accurately and efficiently**
4. **Should give special attention to inexperienced players by explaining the fundamentals of the game**
5. **Should be familiar with current tournaments and other games activities in order to be in a position to discuss them intelligently with players**
6. **Should be familiar with A.B.C., W.I.B.C., A.J.B.C., B.C.A., N.T.T.A., rules and be able to explain them (See Appendix, Exhibit C)**
7. **Should assist in the organization of tournaments, leagues, and other games activities**
8. **Should assist in keeping standing sheets, league files, and charts up to date**
9. **Should maintain an adequate supply of materials to run an efficient counter including a plentiful stock of sharpened pencils for scoring purposes**
10. **Should inform players of facilities, programs, and instructional opportunities available to them**
11. **Should be prepared for leagues and special games activities in advance of starting times, having all necessary forms prepared and arrangements completed**
12. **Should be well versed in recreational area procedures, policies, and rules, and be proficient in carrying them out**

C. Supervisory Responsibilities:

1. Should check the recreation area hourly for cleanliness and appearance
2. Should be sure that the lanes and approaches are "run" every two hours during open bowling, before, and after physical education classes, league play, intramural tournaments and other special tournaments
3. Should be sure that billiards tables are brushed or vacuumed regularly and that the cue chalk supply is replenished when needed

Counter Procedures

Cash Register: Cash should be rung up immediately after each transaction. Under no circumstances should money be put aside to be rung up later. Money should not be placed in the register without ringing it up. If an error is made it should be marked on the register and not made up (or adjusted) by another sale. When the recreation area is closed, the cash register drawer should be emptied and left open.

Check Cashing: Authorization and procedures for cashing checks should be consistent with policies pertaining to other areas within the union building.

Shoe Rental: Rental shoes should be kept in good repair and clean. After being returned by the bowler they should be disinfected and the soles wiped with a dry cloth to remove dust and dirt. Shoe laces should be kept free of knots and replaced if worn. The laces should not be tied together but should be tucked inside the shoes. Collection for shoe rental should be made at the time the shoes are issued and should be so noted on the score sheet.

Waiting List: When the lanes or tables are full, it is necessary to keep the waiting customers in correct order. This may be done by giving out tickets with consecutive numbers. When facilities become available, the number may be called over the public address system. A more personal method is to record names in consecutive order on a waiting list and page the person by name when facilities are available. This method enables the counter attendant to become familiar with the names of the players.

Starting Tournaments and Leagues: The proper method for getting tournaments and leagues started on time is important. An hour before starting time the players using the facilities should be informed that they have only 45 minutes to complete their play. Persons beginning play on tables and lanes should also be informed of the fact before they begin. Announcements should be made at 15 minute intervals indicating the time remaining before starting time. Ten minutes prior to starting time players still occupying the facilities reserved for league or tournament competition should be asked to stop play. During this hour tables and lanes not in use should be cleaned, floors swept, score tables replenished and the recreation area made in readiness for the event.

Billiards Timecard: The charge for billiards is usually made by the hour. When the table is assigned, balls should be issued from the control counter and the table number and starting time should be recorded on the time card. A time clock is usually used. When play has been completed, the ending time should be recorded on the time card. The card should then be inserted into the cash register and the proper amount rung up on the billiards key and certified on the time card. These cards should be consecutively numbered and no number should be missing at the end of the operating day. If errors are made, the cards should

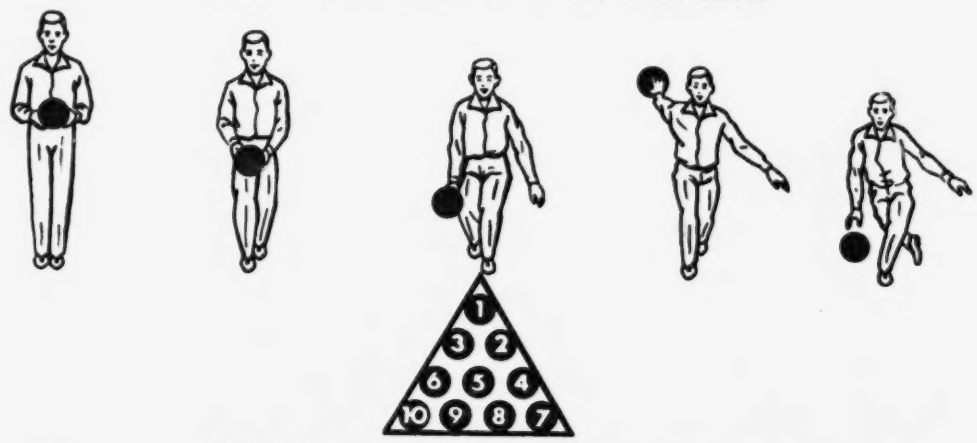
be marked "void" and signed by the person making the error. The same procedures may be used for table tennis transactions if the charge per play is on an hourly basis.

Bowling Charges: The bowler should be issued shoes and should select his ball prior to being assigned to a lane. When he is ready to bowl he should be given a score sheet which is pre-numbered and includes spaces for recording lane number, meter start, meter stop, cycles, and number of lines. The assigned lane number and meter start number should be recorded prior to issuing the score sheet.

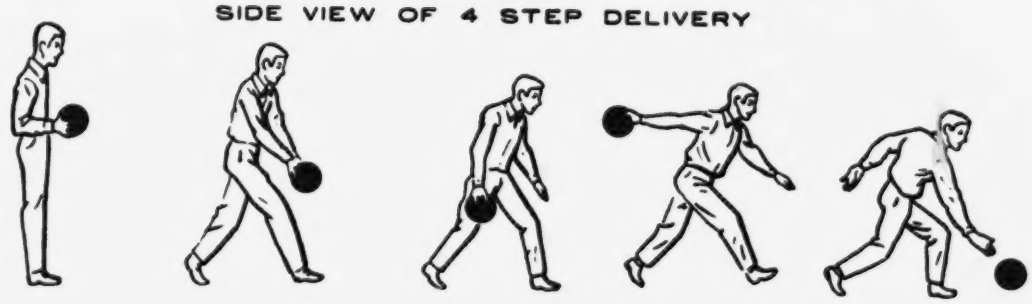
Upon completion of play the bowler should return the rental shoes and score sheet to the desk at which time the meter stop number should be recorded and the number recorded in the meter start space. The score sheet should be inserted in the cash register and the sales should be rung up on the bowling key certifying the transaction and charge on the score sheet. No consecutively numbered score sheet should be missing at the end of an operating day.

Some unions charge by the hour for bowling. The procedures listed above under Billiards Timecard are applicable to bowling if the hourly rate is employed.

FRONT VIEWS OF 4 STEP DELIVERY



SIDE VIEW OF 4 STEP DELIVERY



CHAPTER VIII

Maintenance Personnel and Procedures

Maintenance Man

The man in charge of equipment maintenance is most important to smoothly functioning recreational facilities. His job is largely preventive maintenance. If he performs it well, equipment breakdowns and machine stoppages will be kept to a minimum and the life expectancy of the equipment and furnishings can be extended to provide additional years of continued use and service. The following responsibilities are generally assigned to the maintenance man.

1. He should have a thorough knowledge of the automatic pinsetter machinery in his charge and should be well versed in the techniques of preventive maintenance and repair specified by the manufacturer. (Special schooling is provided by the manufacturer).

2. He should be capable of disassembling billiard tables, replacing cushions, cushion cloths, bed cloths, and repairing billiard cue tips with the precision necessary for accurage conditions for play.

3. He is responsible for the operation and repair of all equipment, furnishings, and machinery in the recreation area including:
   (a) repair parts inventory
   (b) tools
   (c) supplies
   (d) preventive maintenance
   (e) daily care

Maintenance Procedures

1. Daily Lane Maintenance

   A. Dust lanes with a lane duster. Begin at the foul line, push the lane duster to within 12 feet of the head pin, change the cloth, sweep underneath the pin deck, and drag the lane duster back to the foul line. Do not pull the duster on the approach. Upon reaching the foul line, do not step on the approach. step on the adjoining lane and drag the lane duster toward the channels.

   B. Dust and clean the capping and the channels. Place one gutter mop on the single capping and one on the double capping, or ball return, as the case may be, and push the two mops toward the masking unit. Upon reaching the masking unit, dust it carefully

including the down sweep and adjacent areas. Place one mop in each of the flat sections of the channel, pulling the dirt and dust forward, and push the gutter mops forward to the foul line, sweeping dust and residue on to the approach. Once again, avoid stepping on the approach so that dressing will not be carried over to cause a sticky condition.

C. Sweep the approaches with a bed brush, stroking with the grain from the foul line to the settee area. Do not sweep the dirt and dust from lane to lane. Pick it up after two to four lanes with a dust pan and brush.

D. Fill a compression sprayer approximately 1/2 full of lane conditioner.

E. Fasten a polishing pad to a rotary floor machine. Roll the machine down the left side of the lane to the range finder darts. With the machine tilted so that the polishing pad is at right angles to the bed, spray lane conditioner directly on the pad.

For lanes having thirty to forty lines per day, set the spray nozzle adjustment to "Heavy," and spray the buffing pad with three circular motions. For lanes having less than forty lines per day, the spray nozzle should be adjusted to a finer spray, or the amount of conditioner used should be reduced.

Alternate Method of Conditioner Application:

Begin spraying conditioner starting at the pit, six feet from the head pin. Walking backwards from the pit at a medium pace, hold the spray approximately 18 inches above and parallel with the lane. Stop spraying 2 to 3 feet in front of the foul line to prevent conditioner from settling on the approach area. The speed of walking regulates the amount of conditioner spray on the lanes. Spray all of the lanes and allow at least 30 minutes settling time before buffing.

F. Roll the machine to the foul line slightly to the right of center and in line with the second range finder. Adjust the handle of the rotary machine to a comfortable position. With a moderately slow walking pace, guide the machine down the lane in a straight line to within eight or ten feet of the head pin. Return to the foul line slightly to the left of center and in line with the second range finder dart on the left side of the lane. The third pass of the machine should be made on the extreme left side of the edge of the bed. Return to the foul line on the extreme right hand side of the bed, stopping at the foul line.

G. The lanes should once again be "run" with a lane duster.

H. To make certain that there is no dust on the approach area, dust cloths should be fitted over a standard size lane brush and the entire area should be wiped lengthwise.

I. If automatic lane conditioner equipment is used, the lanes must first be prepared by following steps (A), (B), and (C) listed above. When these steps have been completed, follow the manufacturer's instructions for the operation of the machine. After all of the lanes have been conditioned, finish by completing step (H) listed above.

Note: In the dressing of lanes it may be necessary to make certain adjustments due to prevailing lane conditions. If bowling balls are acquiring an oily ring, less dressing should be used. If balls acquire a white ring, lacquer is being picked up and more dressing should be applied.

On a well conditioned lane, it should be possible to create a light smear mark by rubbing a finger across the lane and yet not picking up an excessive amount of dressing on the finger tip.

Other adjustments may also be necessary. For example, if in delivering the ball down the lane it consistently crosses over the one and two pin pocket, the stop line of dressing application should be moved down toward the head pin. Should the reverse condition prevail (the ball failing to come up to the pocket of the one and three pins) the stop line of dressing should be brought back closer to the foul line.

Any and all adjustments should be tested over a period of days before making changes in either direction. If changes are required, they should be made 8 to 10 inches at a time.

The lanes should be cleaned and dressed daily to protect them from ball burns caused by the lack of lubrication between the bowling ball and the bed.

Care should be exercised to keep the dressing to the minimum required. The amount will be governed by the linage per day. An excess of dressing should be avoided to keep the lane bed from becoming stained by oil or dressing.

The polishing pad, fastened to the disc of the rotary floor polisher and used for the application of dressing, may be used over and over again. Constant use of the same pad will improve scores. It need only be changed when it becomes very soiled and the rotary machine becomes difficult to operate.

2. Daily Equipment Maintenance
   a. Follow the schedule of cleaning, lubrication and adjustment prescribed by the manufacturer.

Custodian

The custodian can do much to establish and maintain a pleasant atmosphere and appearance in the recreation area. If he performs his job well, keeping public areas clean and uncluttered, there is less likelihood that customers will litter the area with wrappers and refuse. If, however, clean conditions do not prevail, the likelihood of clutter will be increased.

A. Allocation of Work Load

1. Small installations are likely to combine the responsibilities of the maintenance man and custodian into one position.
2. Where separate positions are justified on the basis of size, the custodian is often responsible for daily lane care in addition to the duties listed below.
3. Some unions assign custodial responsibilities in the recreation area to the building custodial staff on a part-time scheduled basis.

B. Duties and Responsibilities

1. Should dispose of all accumulated waste in the area
2. Should empty waste receptacles and ash trays
3. Should sweep and mop all hard floor surfaces
4. Should vacuum all carpeted areas
5. Should clean restrooms and replenish supplies
6. Should clean walls and mirrors
7. Should clean and polish glass in customer contact areas
8. Should dust all surfaces including:
   (a) settees
   (b) ball returns
   (c) chairs
   (d) counters
   (e) billiard tables
   (f) table tennis tables
9. Should polish bowling balls and billiard balls
10. Should report repair needs to maintenance man immediately

CHAPTER IX

Planning and Conducting Tournaments

The following outline should serve as a helpful checklist of arrangements to be made in the planning of games tournaments. Planning can do much to assure a successful and smoothly run program. It can also do much to establish an air of confidence and authority in the arrangements on the part of those participating.

A. Preliminary Planning

1. Establish:
   a) Eligibility requirements
   b) Tournament rules
   c) Entry fees or charges
   d) Awards
   e) Tournament
   f) Dates
   g) Schedules

B. Promotion

1. Utilize all effective campus methods
   a) State information clearly and simply

C. Conducting the Tournament*

1. Personnel
   a) Tournament manager
   b) Judges
   c) Scorers
2. Facility
   a) Use regulation equipment
   b) Maintain uniform conditions
3. Procedure
   a) Adhere to schedules and rules
   b) Post scores immediately
   c) Declare winners

D. Follow-Through

1. Conduct awards ceremony
2. Provide tournament results for press and broadcast coverage
3. Compile results and prepare a complete report for future reference

* For specific tournament play see sources listed in bibliography of games materials.

APPENDIX

EXHIBIT A

AMATEUR STANDING POLICY FOR PARTICIPATION IN ASSOCIATION OF COLLEGE UNIONS-INTERNATIONAL TOURNAMENTS

I. AMATEUR STATUS

To be eligible for competition in any of the Association of College Unions-International Intercollegiate Games Tournaments, a participant must declare himself as an amateur in each of the games areas in which he chooses to participate.

II. AMATEUR DEFINITION

An amateur competitor is one who engages in the game solely for the pleasure and physical, mental, recreational and social benefits he derives therefrom and to whom the game is nothing more than an avocation or hobby.

III. DETERMINATION OF INELIGIBILITY

A participant shall be declared ineligible for competition as an amateur for any of the following reasons:

A. Fraud - participating in any games competition under an assumed name.

B. Competing for money -- has directly or indirectly competed in any games activity for pecuniary reward. Participant shall be ineligible if he accepts financial aid, other than that administered through the institution, which is awarded due to particular games skills.

C. Coaching for money -- participant shall be ineligible if he has directly or indirectly received pay or financial benefits in consideration of, or as a reward for, instructing or preparing any person in or for any competition, especially in any of the games areas presently sponsored by the Association of College Unions-International Recreation Committee.

D. Participant shall be ineligible if he has signed a professional contract with any professional games organization.

E. Participant shall be ineligible if he accepts any financial assistance from a professional games organization or a commercial organization for use of his name or picture when this use clearly implies endorsement of any product.

F. A participant shall be ineligible if he receives pay for a radio or television appearance other than the expenses that might be incurred in his travel to and from the studio.

G. A participant shall be ineligible if he accepts awards which are not within reason and acceptable to the institution or other recognized association of which his institution belongs.

IV. REINSTATEMENT TO AMATEUR ELIGIBILITY

A. The Recreation Committee recognizes the difficulty of enforcing the amateur standing policy outside the college ranks. Steps are being made to inform the general public in all areas of the games of the amateur standing policy. However, until the committee feels that satisfactory coverage has been made in all areas, the following reinstatement policy will be in effect.

B. Any person entering college as a freshman or from the military service, who has unknowingly violated the amateur ruling prior to entering college, may request reinstatement to amateur eligibility providing strict adherence to the amateur rules is maintained for a one-year* period, prior to participation in A.C.U. Tournament Program.
* (one school year)

C. Procedure:
1. Application for reinstatement must be made in writing to the chairman of the Recreation Committee.
2. Application must be signed by an appropriate authority of the sponsoring institution (e.g. Union Director, Games Director, Dean of Students, or Faculty, or Staff Adviser).
3. Letter of reinstatement will be forwarded to the individual involved prior to the coming year's program and/or at a date as established one year following the receipt of reinstatement application. (Normally in September of each year.)

V. INFORMATION

Write to the Chairman, Association of College Unions-International Recreation Committee.

EXHIBIT B

MATERIALS FOR GAMES PROMOTION

Bowling

CO-ED BOWLING CHAMPIONS

Motion Picture
16 Minutes
Sound
Color

Edgar A. Whiting, Secretary-Treasurer
Association of College Unions-International
Willard Straight Hall
Cornell University
Ithaca, New York

On-the-lane shots taken at the 1962 National Intercollegiate Women's Bowling Tournament at Pheonix, Arizona, as a special part of the Women's International Bowling Congress Championships. (Handling charge only)

COLLEGIANS TO STARDOM

Motion Picture
12 Minutes
Sound
Color

Edgar A. Whiting, Secretary-Treasurer
Association of College Unions-International
Williard Straight Hall
Cornell University
Ithaca, New York

On-the-lane shots taken at the 1962 National Intercollegiate Men's Bowling Tournament at Des Moines, Iowa, as a special part of the American Bowling Congress Championships. (Handling charge only)

1961 INTERCOLLEGIATE BOWLING CHAMPIONSHIPS

Motion Picture
11 Minutes
Sound
Color

Edgar A. Whiting, Secretary-Treasurer
Association of College Unions-International
Williard Straight Hall
Cornell University
Ithaca, New York

On-the-lane shots taken at the 1961 National Intercollegiate Bowling Tournament at Detroit, Michigan, as a special part of the American Bowling Congress Championships -- narrated by Bill Stern. (Handling charge only)

1960 INTERCOLLEGIATE BOWLING CHAMPIONSHIPS

Motion Picture
20 Minutes
Sound
Black and White

Edgar A. Whiting, Secretary-Treasurer
Association of College Unions-International
Williard Straight Hall
Cornell University
Ithaca, New York

On-the-lane shots taken at the 1960 National Intercollegiate Bowling Tournament at Toledo, Ohio, as a special part of The American Bowling Congress Championships -- narrated by Bill Stern. (Handling charge only)

BOWLING COLLEGIANS

Motion Picture
20 Minutes
Sound
Black and White

Edgar A. Whiting, Secretary-Treasurer
Association of College Unions-International
Williard Straight Hall
Cornell University
Ithaca, New York

The complete story of the trip to the 1959 National Bowling Tournament at St. Louis, Missorui, as a special part of the American Bowling Congress Championships. (Handling charge only)

AMERICA BOWLS

Motion Picture
30 Minutes
Sound
Black and White

National Bowling Council
1420 New York Avenue, N. W.
Washington, D. C.

Outstanding American Bowlers demonstrate their technique and give step by step instructions. Features Ned Day, Buddy Bomar, Marion Ladewig, Andy Varipapa, Joe Norris, Connie Schwoegler. (Free except for return postage)

LEARN TO BOWL

Soundslide
20 Sound Filmstrips
Color

Brunswick Corporation
623 South Wabash Avenue
Chicago 5, Illinois

Most comprehensive in providing film instructions on the fundamentals of bowling. Devised with five separate film courses for men, women, juniors and seniors.

BEGINNING BOWLING

Soundslide
3 Sound Filmstrips
Color

Athletic Institute
209 South State Street
Chicago 4, Illinois

A short visual history of the game; explanation of equipment, safety, and etiquette; step by step explanation and demonstration of the fundamentals and form for the four step delivery; an explanation of the theory of aiming, with emphasis on spot bowling and a visual explanation of scoring. (Free except for postage)

BETTER BOWLING

Motion Picture
12 Minutes
Sound
Black and White

Brunswick Corporation
623-633 South Wabash Avenue
Chicago 5, Illinois

Ned Day demonstrating hook and straight ball bowling. Spot bowling demonstration. Andy Varipapa's trick shots. Col. Stoopnagle in slapstick bowling. (Free except for return postage)

BOWLERS FAIR

Motion Picture
12 Minutes
Sound
Black and White

Brunswick Corporation
623-633 South Wabash Avenue
Chicago 5, Illinois

All women bowlers, ranging from four years old, featuring Catherine Fellmeth and Val Mikiel. (Free except for return postage)

HEADPIN HINTS

Motion Picture
8 Minutes
Sound
Black and White

AMF Pinspotters, Inc.
261 Madison Avenue
New York 16, New York

Bowling instructions by Lee Jouglard and Sylvia Wene. Also shows them bowling spare, split and trick shots. (Free except for return postage)

SPLITS, SPARES AND STRIKES

Motion Picture
10 Minutes
Sound
Black and White

Teaching Film Custodians, Inc.
25 West 43rd Street
New York 36, New York

Tillie Taylor, a leading woman bowler, demonstrates right and wrong technique. ($15.00 for one year period)

Billiards

LEARN TO PLAY BILLIARDS

Soundslide
2 Lesson Filmstrip
Color

Brunswick Corporation
623-633 South Wabash Avenue
Chicago 5, Illinois

Two-part film covering the basic instructions of pocket billiards. Includes instructions on grip, stance, bridge, aim, and stroke as well as draw, follow and stop shots.

CUE TRICKS

Motion Picture
12 Minutes
Sound
Black and White

Brunswick Corporation
623-633 South Wabash Avenue
Chicago 5, Illinois

Irving Crane and Ruth McGinnins in a trick-shot sequence. Jimmy Catrano, nine year old boy-wonder, performing simple billiard tricks. (Free except for return postage)

MASTER OF THE CUE

Motion Picture
12 Minutes
Sound
Black and White

Brunswick Corporation
623-633 South Wabash Avenue
Chicago 5, Illinois

Willie Hoppe in fundamentals and trick shots. (Free except for return postage)

PINS AND CUSHIONS

Motion Picture
12 Minutes
Sound
Black and White

Brunswick Corporation
623-633 South Wabash Avenue
Chicago 5, Illinois

Joe Falcaro on bowling form and trick shots, Ponzi on billiard tricks. Marceline Vaughn billiard tricks. Charlie Peterson billiard tricks. (Free except for return postage)

Q MEN

Motion Picture
12 Minutes
Sound
Black and White

Brunswick Corporation
623-633 South Wabash Avenue
Chicago 5, Illinois

Willie Hoppe and Charlie Peterson rendering some instructions in the fundamentals of carom billiards. Irving Crane doing the same in pocket billiards. Trick shots by all three. (Free except for the return postage)

Table Tennis

RACQUET ACTION

Motion Picture
10 Minutes
Sound
Black and White

Castle Films Department
United World Films
1445 Park Avenue
New York 29, New York

The speed and skill of experts with racquets and ball is depicted. ($21.75 per print)

TABLE TENNIS

Motion Picture
10 Minutes
Sound
Black and White

Teaching Film Custodians, Inc.
25 West 43rd Street
New York 36, New York

Experts play in singles and doubles. After an explanation of the grip, the players demonstrate push shots, service, spin shot and return, forehand and backhand shots and footwork. ($15.00 for one year period)

TABLE TENNIS TOPNOTCHERS

Motion Picture
Sound

Audio Film Center
30 West 32nd Street
New York 1, New York

A closeup of one of America's most popular indoor sports. Two of the sport's topflight players give sparkling demonstrations of their skill and accuracy at the game as well as practical advice on how the average table tennis fan can improve. (Rental $1.50 plus postage, plus 10¢ handling insurance)

Bridge

HOW TO START PLAYING BRIDGE IN 22 MINUTES

Association of American
Playing Card Manufacturers
420 Lexington Avenue, New York
or
Intercollegiate Tournament Director

Prepared hands that have been used in past National Tournaments are available from the Tournament Director at no charge. These prepared hands and scoring sheets may be used on your campus.

EXHIBIT C

DIRECTORY OF GAMES ASSOCIATIONS

American Billiard Congress
915 Edison Building, Toledo, Ohio

American Bowling Congress
1572 East Capitol Drive, Milwaukee, Wisconsin

American Junior Bowling Congress
3925 West 103 Street, Chicago 55, Illinois

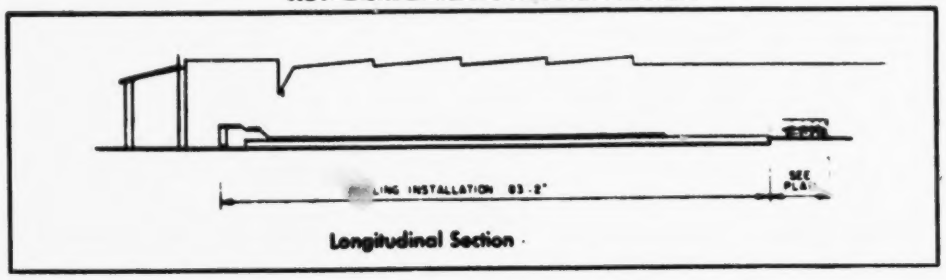
United States Chess Federation
80 East 11 Street, New York 3, New York

United States Table Tennis Association
2650 Oak Park Boulevard, Cuyahoga Falls, Ohio

Women's International Bowling Congress
1225 Dublin Road, Columbus 12, Ohio

EXHIBIT D

KEY BOWLING LANE DIMENSIONS



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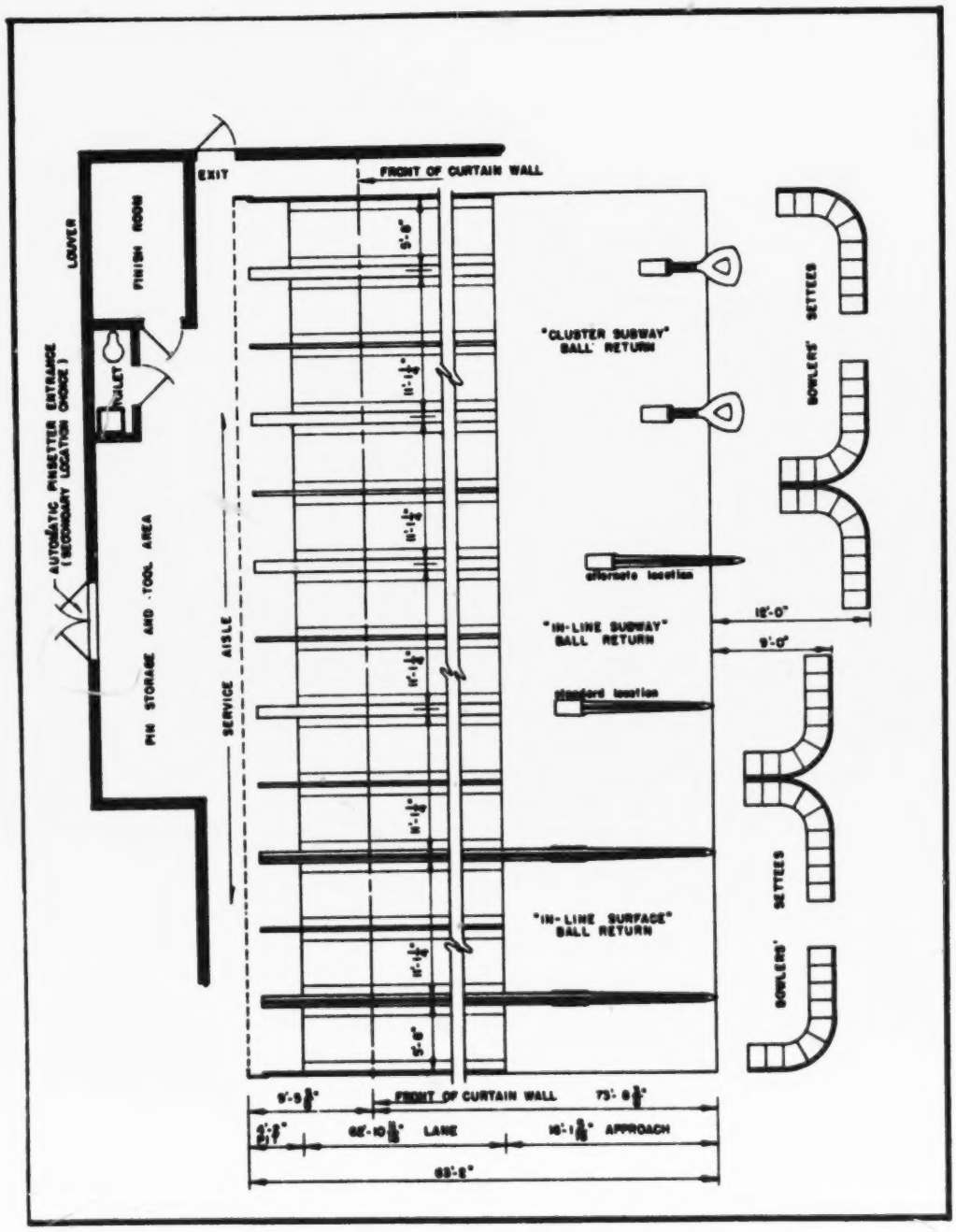


EXHIBIT E

BILLIARD TABLE SPECIFICATIONS

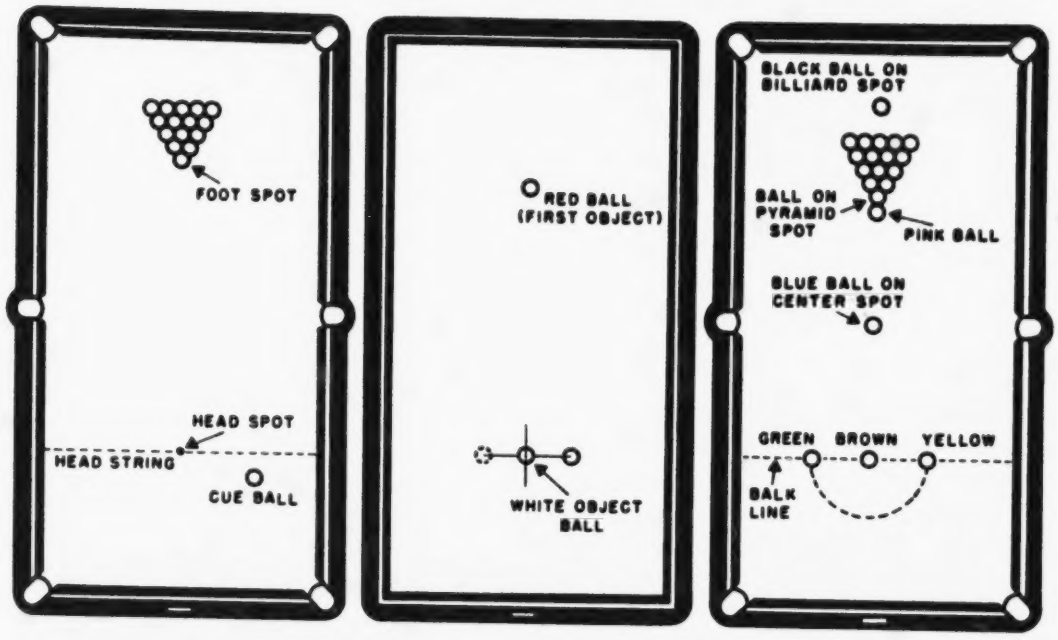


TABLE PLACEMENT

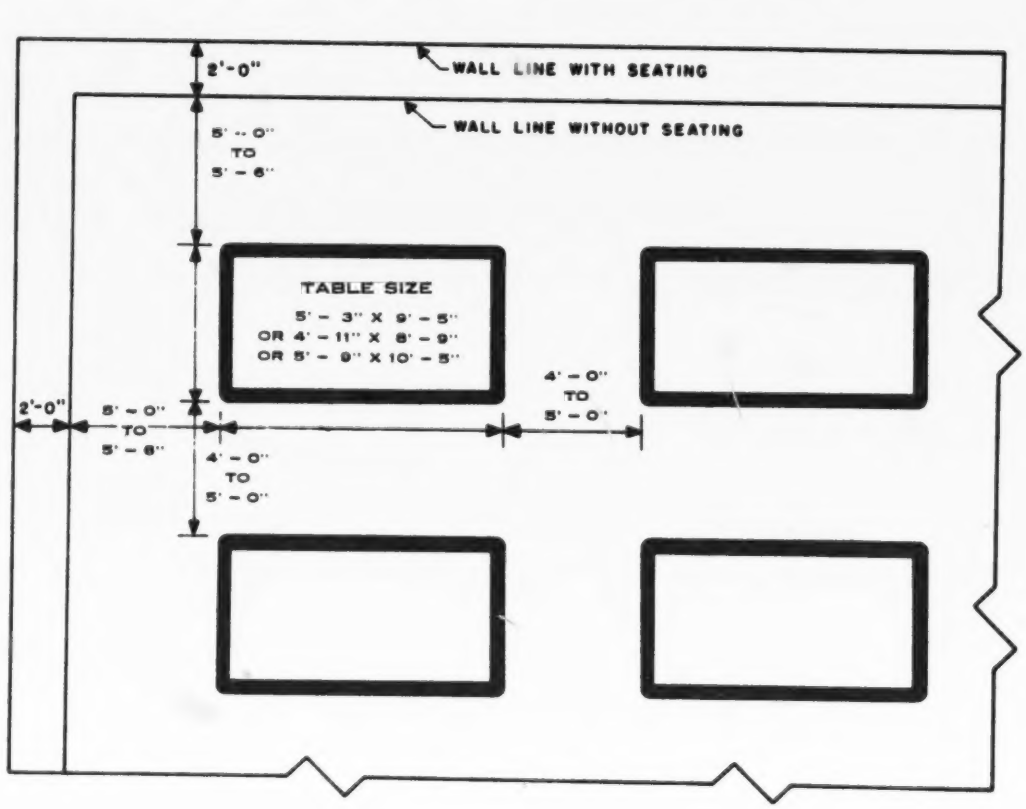
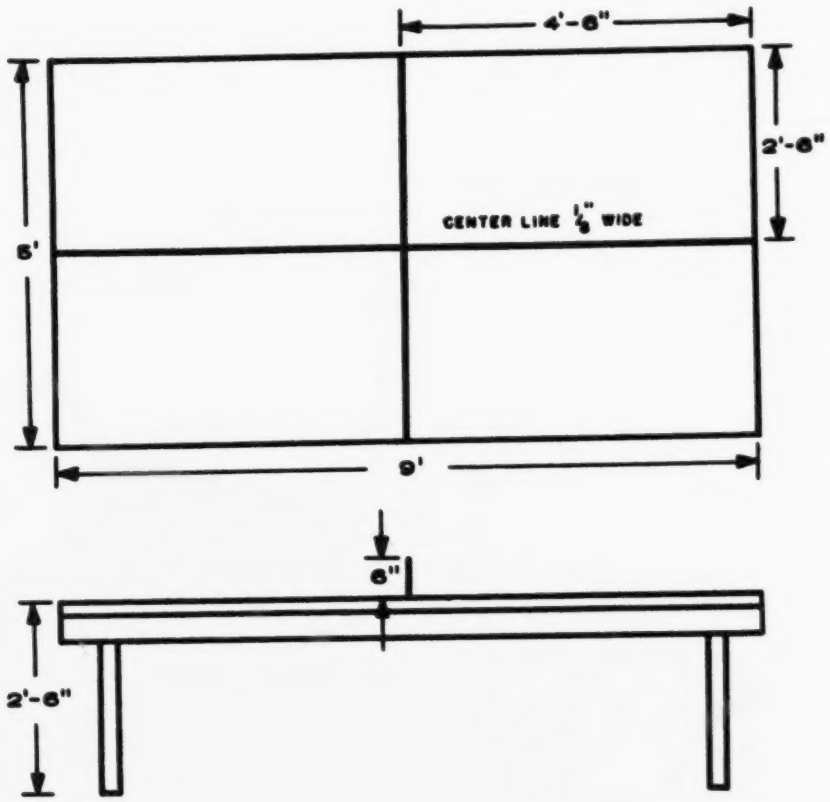
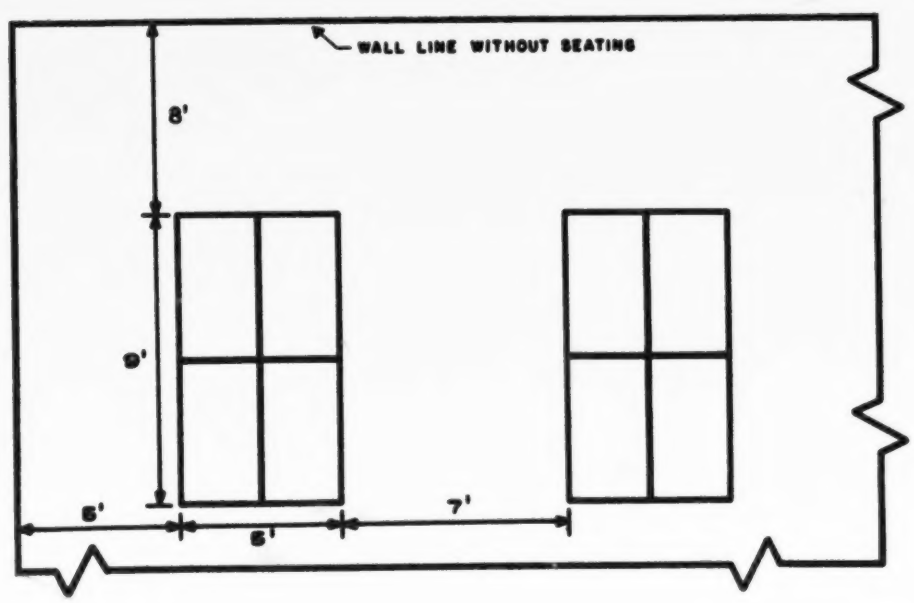


EXHIBIT F

TABLE TENNIS — TABLE SPECIFICATIONS





REGIONS OF THE ASSOCIATION OF COLLEGE UNIONS-INTERNATIONAL

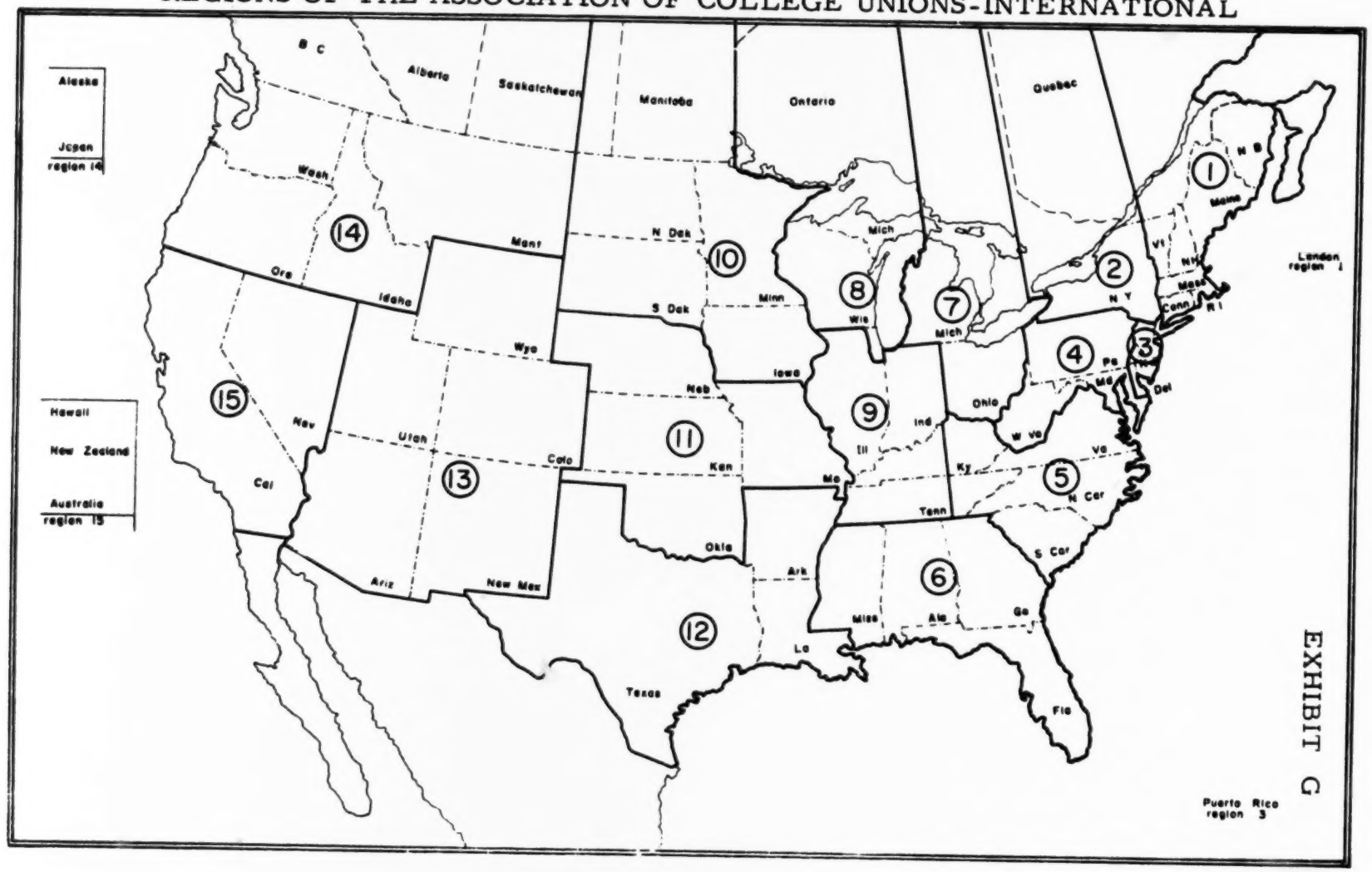


EXHIBIT G

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Association of College Unions-International

The Association was founded in 1914; it is one of the oldest intercollegiate educational organizations. Its purpose is to provide an opportunity for unions to join in studynig and improving their services, and to assist in the development of new college unions.

The Association membership numbers approximately 650 colleges and universities, including junior colleges, in the United States, Canada, England, Australia, New Zealand, Japan, Taiwan, the Philippines, and Puerto Rico. Included are many "Houses", "Halls", and "Centers" which serve as community centers for the campus, whether they be found at co-educational, men's, or women's colleges. It is not necessary to have a building to be an Association member.

Regional Representatives from 15 geographical areas of the United States and Canada assist in the general development of the Association, advise on matters of policy, and arrange for regional conferences in the fall which emphasize both student and staff participation.

An international conference is held annually for staff members.

A central headquarters, information service, and employment service are maintained at Willard Straight Hall, Cornell University, Ithaca, N. Y. Copies of all Association publications may be obtained from this office. Also on file are copies of surveys and studies made on many aspects of union operation.

The standing committees of the Association foster studies and programs concerned with the arts, recreation, junior colleges, international relations, public relations, professional development, research, joint efforts with other educational associations, and special projects.